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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|----------------------------------|----------------|----------------------|-------------------------|-----------------|
| 10/708,977 | 04/05/2004 | Joseph Pacchia | 2003-018 | 2976 |
| 32170 7: | 590 07/28/2005 | | EXAM | INER |
| U.S. ARMY TACOM-ARDEC | | | ELDRED, JOHN W | |
| ATTN: AMSTRA-AR-GCL BLDG 3 | | ART UNIT | PAPER NUMBER | |
| PICATINNY ARSENAL, NJ 07806-5000 | | | 3644 | |
| | | | DATE MAILED: 07/28/2005 | 5 |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | |
|---|--|--|--|--|--|--|
| | 10/708,977 | PACCHIA, JOSEPH | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | J. Woodrow Eldred | 3644 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD IN THE MAILING DATE OF THIS COMMUN. - Extensions of time may be available under the provision after SIX (6) MONTHS from the mailing date of this community (1) If the period for reply specified above is less than thirty (1) If NO period for reply is specified above, the maximum is 1. Failure to reply within the set or extended period for reply Any reply received by the Office later than three months earned patent term adjustment. See 37 CFR 1.704(b). | NICATION. as of 37 CFR 1.136(a). In no event, however, may a resimunication. (30) days, a reply within the statutory minimum of thirty statutory period will apply and will expire SIX (6) MON by will, by statute, cause the application to become AB | eply be timely filed y (30) days will be considered timely. THS from the mailing date of this communication. BANDONED (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on | | | | | | |
| 2a) This action is FINAL. | 2b)⊠ This action is non-final. | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposition of Claims | | | | | | |
| 4) Claim(s) <u>1-15</u> is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) is/s | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| 5) Claim(s) is/are allowed. |)☐ Claim(s) is/are allowed. | | | | | |
| 6)⊠ Claim(s) <u>1,2,4 and 5</u> is/are rejected | | | | | | |
| , | Claim(s) <u>3 and 6-15</u> is/are objected to. | | | | | |
| 8) Claim(s) are subject to restr | iction and/or election requirement. | · | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| 11) The oath or declaration is objected | to by the Examiner. Note the attached | d Office Action of John PTO-152. | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: | | | | | | |
| 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
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| Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) | | | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 4) Interview Summary (PTO-413) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152) 6) Other: | | | | | | |

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DETAILED ACTION

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1, 2, and 4 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Bar et al (6,511,016).

See especially Figures 3 and 5; and column 5, lines 3-6, 20-43, and 55-65.

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bar et al (6,511,016) in view of Rastegar et al (6,727,485).

Bar et al discloses a projectile with flight altering apparatus comprising a plurality of deployable pivoting fins with springs, coupling means connecting adjacent fins (either flexible bridging portion 33 of Figure 3 or spring plates 34 of Figure 5) which will inherently reduce and distribute loads on the fins, and a caging arrangement (holding sleeve 29) which allows the fins to deploy when activated. Bar et al fails to disclose the caging arrangement as being a single wire passing through the main fins. Rastegar et al teach that it is known to provide a single wire passing through fins as the means of deploying the fins to the desired position. See column 7, line 53 – column 8, line 27, especially element 304. Motivation to combine is the mere substitution of known means of deploying fins on a projectile. To employ the teachings of Rastergar et al on the

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projectile of Bar et al and have a single wire caging arrangement is considered to have been obvious to one having ordinary skill in the art.

- 5. Claims 3 and 3-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Woodrow Eldred whose telephone number is 571-273-6901. The examiner can normally be reached on Monday to Thursday, from 8:00 a.m. to 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Teri Luu can be reached on 571-272-7045. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

J. Woodrow Eldred Primary Examiner Art Unit 3644